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A UNIQUE SITUATION IN ECONOMIC THEORY

There is a widespread conviction on the part of economists today that the literature of the last two decades, and especially since the Great War, has been critical in tone, calculated to brush aside old convictions, to undermine former beliefs, but not notable for successful attempts at reconstruction. This conviction of course is not peculiar to the present age, nor even to economists. Indeed, as history shows, thought moves in ascending and descending curves, one group of investigators building up what the next is certain in large part to tear down.

It is not surprising, then, that during the last few years scientists and philosophers in many fields have recanted solemnly, sometimes even exultantly, what earlier thinkers had affirmed with equal vigor. On all sides criticism has been rife against inherited faith. Mathematicians for instance have gained fame for innovations that smack of charlatanry, although they are anything but that. Physicists and chemists have joined in ridding their treatises of doubtful points. Between some sciences boundary lines have been shifted, or declared non-existent. In other sciences totally new problems stand forth. Economists share this unrest in proposing alterations which must prove fatal to two dominant types of analysis, utilitarianism (or classicism, to use the older term) and marginism, which together fill a century of economic research.

More and more, economists have protested against eighteenth century premises in psychology and government. More and more, they have been willing to disavow their former faith in sensationalism and associationism, the chief pillars of British empirical psychology. That margins are a real key to exchange values, that psychology has a place in economics, that the intellectualistic theory of the feelings contains even a semblance of truth—these old teachings have been attacked by a growing number of earnest-minded students, not all of whom are young in years or by temperament disposed to assail authority. There has been a decided tendency for descriptions of existing institutions and practices, not for analysis with a view to scientific generalization. of late have apparently been satisfied to depict things as they are, to present a lucid picture of business conditions in all their phases. tell of these norms and processes rather than to discuss underlying principles or universal laws has become the ideal of many teachers in American colleges and of a host of younger specialists. curricula prosper in the sign of Commerce and Finance. administration and vocational economics dictate not only school policies, but also rules for an individual sifting of materials in the field of Some of our most promising economists have left the social science. campus to accept employment in banks, manufacturing plants, or public administration.

All this may of course be welcomed as proof of the versatility of our economists, or perhaps as an index of the growing appreciation of expert knowledge by leaders in industry and trade. Nevertheless, this interest of teachers in business statistics, this enthusiasm for a competitive evaluation of products and earnings, this neglect of analysis necessary to reveal fundamental principles—this change has a deeper significance than appears at first sight. To illustrate the situation, let us note first that until now economics has been a science aiming at the discovery of laws, professing to state quantitative relations, and resting on a well-developed system of psychology.

The physiocrats to be sure did not elaborate a theory of human nature in order to found a science; but they were convinced of the possibility of finding permanent social laws, taking their cue from the epoch-making researches which culminated in Newton's Principia. What Copernicus, Kepler, and Newton had done for physical phenomena, the physiocrats hoped to do for the psychic and economic field. Thus a cosmological monism, supported by a materialistic metaphysics, furnished the incentive to studies whose most famous achievement was the Tableau Economique. Laws were shown to exist in the creation and circulation of wealth; and, because of this, reform measures gained a hearing that adumbrated the French Revolution. If the physiocrats did not succeed in converting Europe to their doctrine, the chief reason was probably their failure to connect economics with a definite psychol-This at any rate was a peculiarity of the earliest inquiry into social laws, and, ever since, economists have relied on essentials of human nature to make their teachings definite and self-consistent.

Smith first introduced theories of human nature into an analysis as naturalistic as that of his immediate predecessors. He considered a science of economics possible because of a few outstanding traits of man which guaranteed self-preservation, while also promoting the welfare of society at large. Laissez faire was shown to be a sound policy because self-interest and sympathy level prices and incomes and benefit the largest number. Smith's work therefore constituted a theory of prosperity as well as an exposition of fact. It was a picture of a social economy in praise of the "normal man" and of a "natural" price.

Although the successors of Adam Smith had much in common with him and borrowed freely from his treatise, yet in important respects they proceeded independently. For the Ricardian system was not built on an ethical postulate which Smith made prominent even before writing on economics. Instead, the theory of valuation was adapted directly to economic ends, so that it coincided only for a short time with the moral criterion known as individualistic hedonism. In other words, after Smith economics became a science of exchange-relations, a science of catallactics which sacrificed breadth to an ideal of logical

precision and neatness. By Malthus and by James and John Stuart Mill (father and son) economics was transformed into a compact system of thought that depended upon Hartley and Bentham for an explanation of all mental phenomena. The objective viewpoint of Smith, of course, was retained. Prices were still treated as expensefacts or as quantities of labor solidified into tangible goods, so that in this as well as in the unqualified acceptance of non-interference, the nineteenth century was linked with the eighteenth. But otherwise the breach between naturalism and utilitarianism (classicism of the Ricardo-Mill type) was complete. Smith had never invoked the aid of sensationalism; nor had he a clear idea of a plutology such as the Ricardians systematically furthered. Whereas he emphasized production and the conditions of a rising level of living, his successors declared the central problem to be price and distribution. Competitive, pecuniary standards were employed, the results being bewildering for some purposes, as the Earl of Lauderdale was among the first to show.

Again, beginning with the classicists in England and on the continent, legal premises were specifically mentioned as a logical prerequisite to catallactics; and, what is much more important, John Stuart Mill added a methodology for the social sciences which has never been equalled, and which did not suffer greatly at the hands of the marginists, who hoped to improve so much on Mill's Principles. Mill, that is to say, used sensationalism to formulate a logic of economics, and to vindicate the individualistic standpoint. From his psychology he derived an atomistic, static conception of mind and social processes. With the aid of associationism also he built up an argument for deduction in economic inquiry. The difference between a mechanical and a chemical form of causation seemed decisive to Mill. clear to him that induction was of no avail where "the separate effects of all the causes continue to be produced, but are compounded with one another and disappear in one total." "This case it is," he believed, "which for the most part eludes the grasp of our experimental methods," and since "the effect which is produced in social phenomena by any complex set of circumstances amounts precisely to the sum of the effects taken singly . . . social science therefore is a deductive science." Although his account of the matter is not altogether consistent, although Comte's influence is as conspicuous in Mill's qualification of the deductive method as in his later views on a social organism and on qualitative pleasures, yet on the whole his methodology rests on the sensationalism of his father. Through Mill's Logic of 1843, utilitarian economics became a well-rounded system of thought. Hedonism was the theory of motivation, if not of valuation. Values

¹Logic, book III, ch. 10, §4.

²Ibid., book VI, ch. 9, §1.

were objectively explained, but, aside from that, psychology had completely taken possession of the new science of catallactics.

This implicit reliance upon hedonistic psychology the historical school combated in developing its own doctrines. Because of its vigorous protest against statics and catallactics, as well as on other grounds, the historical school deserves to be put in a class by itself. However, it did not break the continuity of economic thought, because in the first place the historical school was in quest of laws every bit as much as its opponents, so that the existence of a science of economics was not seriously challenged, and in the second place its adherents proved historians rather than economists. Whenever the search for laws was diligently carried on, a conversion to utilitarian economics in one form or another took place; in the other case, the output proved to be history and ethics more than economics. The historical school consequently was merely an interlude in the development of catallactics, and not the occasion for its downfall. Whatever the virtues of the thought promulgated by Roscher, Knies, and Schmoller in later days, it was not likely to daunt the friends of a static, exact science who found one law after another and knew exactly where their investigations ended.

Marginism correspondingly had a victorious career, not because it laid bare the weaknesses of the historical school—for that was easy and vet could not demonstrate its own worth—but because it agreed at heart with utilitarianism of acknowledged standing. The differences between these two systems have been exaggerated, for what after all distinguished the two? It was not their psychological premises, for both believed in sensationalism and hedonism. It was not their methodology, for both used deduction, statics, catallactics, and cosmopolitanism. It was not the employment of legal assumptions of freedom of contract, or the use of competitively colored definitions, for here again they were agreed. And are not these vital points in any economic creed? What separated utilitarianism from marginism was essentially the difference between an objective and a subjective theory of The Ricardians, as stated, analyzed price and income as composites of labor and money facts. The idea of utility was not really exploited as Say had desired in his work of 1803. But for the marginists utility or want was the key to exchange value in all its manifestations. Instead of wants being a mere auxiliary, they now became a prime cause. Instead of pleasure as a force for action exclusively, we now hear of it as a determinant of values also. Hedonism turned out to be a theory of economic values as well as of motivation. It is not surprising that these striking differences between the two systems were exaggerated, but later writers will no doubt be aware also of the substantial agreement between them. They will thus emphasize the continuity of economic thought, the persistent search for real laws, the supremacy of sensationalistic psychology in methodological questions, and the abstract nature of the generalizations reached on the basis of the theory of an "economic man."

The second main point calling for consideration in a survey of economic theory today is the question of the effect which the rejection of sensationalism must have upon economics as a science and a method. In other words, if we abandon the old psychology and the logic sprung in large part from it, can we hope to make economics as scientific as ever? Are we to offer a new qualitative and quantitative analysis in lieu of the untenable utilitarian and marginal theories? Will economics continue to be a static, deductive discipline as before? Or must data become important that will reconstruct economic methodology as well as its leading doctrines of fact? This surely is a fair question as critics see it, a question which many have hinted at in one way or another.

The difference between a qualitative and quantitative treatment of events is well known to logicians, and has always played a conspicuous part in natural science. We find there regularly two main types of formulas or laws-those which deal with events solely, and those which measure also the relative magnitudes of these events or things. the one case we have a statement of things which recur invariably in the same combination (barring conditioning phenomena) and which are known as sequences or coexistences. That the regularity relates actually to the abstract, i. e., to events taken out of a perceptual environment enveloping us all, is true; but this artificial character of our laws of nature does not invalidate the distinction between qualitative and quantitative interpretations. Science may aim at either one alone, although usually it will be possible to combine the two, detaching the law itself from the concomitants which seem to interfere with its operation and from a given standpoint may be called "conditioning phenomena." To illustrate, if we explain a thunderstorm by a reference to wind, humidity of the atmosphere, electricity and the transmission of sound, we have virtually stated the law regarding it. law is this recurrence of qualities or things which, in one aspect, means a thunderstorm. But increasingly since the Renaissance the ideal of all scientists has become exact quantitative correlation. disclose the real nature of commonplaces men have been obliged not only to show what sorts of events went regularly together, but also to ascertain their relative amounts and their relative changes of magni-Such a quantitative analysis is indispensable to a systematic subsumption of particulars under a larger principle, or to the practical applications by which the last few generations have benefited so enormously. Physics and chemistry for this reason have become models

of exact science. Boyle's law of gases is an instance of the many laws in physics comprising qualitative and quantitative relations recurring without exception, if properly defined and measured. In biometrics quantity is of first importance, and the meteorologist would like to master all the magnitudes involved in his survey, if he but could.

As for utilitarianism, both its qualitative and quantitative analysis must meet with our approval, for it meant strictly a determination of price either by facts other than price, or by expenses which themselves were prices but could not on that account be considered for a correlation with any particular price. Its procedure therefore was correct as regards price analysis. But it made the mistake of adopting sensationalism, predicating an "economic man" to the exclusion of other items in valuation; and in addition it suffered from a static conception which was too abstract to be serviceable. It meant a deductive method, for one thing, and a narrow circumscription of economics for another. Thus catallactics supplanted the social economy of the naturalists, and the quantitative analysis proved impracticable because of inevitable discrepancies between labor-amount and prices.

Marginism, however, was no improvement on this system. On the contrary, it was worse in that it used a faulty psychology not only to explain absolute value, but also to find an exact quantitative relation between this and exchange rates. As a qualitative study therefore it erred seriously in tracing valuations entirely to sensation; it misunderstood the essentials of perception and judgment, of feelings and the ideals of men indissolubly bound together in the body politic. Furthermore, it could not avoid a vicious circle when it insisted upon reducing wants or prices to psychic states. Since these do not admit of measurement, the intensity of desire and order of preference had necessarily to be judged by prices paid, and this begging of the question was not mitigated by a resort to margins. The margins also needed explanation, and yet would remain a mystery forever in the light of the unbridgeable chasm between things and values or rights!

Today, then, economists should feel justified in asking: May objective correlations and measurements be substituted for the subjective ones which have proved such a dismal failure? Shall we fill the gap left by the disintegration of the old economic creeds? And if so, what method must be further developed to ensure us good results?

In speaking so candidly, we need not ignore other questions raised since the turn of the century. We may willingly admit the force of the time-honored argument for free will, or for the radical difference between a purely factual and an ethical treatment of socio-economic events. Such puzzles have a fascination of their own, to say nothing of their importance to the philosopher. But we may for present purposes waive them or consider them solved. Thus it seems incontestable

that for the scientist causation is no more than a particular, more or less arbitrary, way of stating the interdependence between events grouped into a law of nature. He merely admits the regular recurrence of events in groups more or less minutely analyzed, and then applies the term "cause" or "effect" to them according to angle of vision and practical needs. The human will is no proof of an exception to the postulate of determinism or of the uniformity of nature, so far as our scientific method is concerned. We may as human beings consider our wills a reality; but the statistician has strong reasons for believing our freedom to be limited. There is regularity in social events no less than in physical. The difference is one of degree, due to the greater complexity of the units correlated by the statistician; but causation surely exists here as elsewhere. Or perhaps we had better disregard causation altogether, and treat all events, social and physical, as sequences or coexistences merely, for this has the sanction of contemporary philosophers and scientists. Ethics, to be sure, is not a study of events as such. The line of demarcation between descriptive and normative disciplines is valid, provided we put on the one side ethics alone, and on the other the rest of our inquiries. With that understanding, we should grant the conflict between "is" and "ought," the cardinal difference of viewpoints which prevail in, say, economics and ethics respectively. No canon of an ultimate good can ever be derived from a discovery of laws or from a bare description of fact; they are worlds apart. But once we have agreed somehow upon a definition of the highest good we may divide men into good and bad, and likewise estimate happenings among men by a moral standard. this sense economic data may be connected with ethical norms, the latter coming first and settling the issue directly or indirectly.

Granting the significance of such problems for present-day economists, our major task nevertheless is the question of the substitution of a new methodology of economics for the old, if economics is actually to remain a science—not that this is to be presumed beforehand. it is at any rate reasonable to cast about for ways to test such a presumption. We may come to the realization, for instance, that in abandoning sensationalism and its attendant teachings of causality and induction we have also severed ties with statics and catallactics. may appear that with the rejection of a few premises we have entered upon a new kind of qualitative and quantitative analysis. The most important point for future reference will probably be the decisive difference between the units of physical science and those studied by sociologists or economists; here, and not in prevailing psychological teachings, will be found the key to many of the questions now pending. If economics is to become a factual science, how can the data of a conceptual economics such as marginism serve any useful purpose?

If we are to work with a minimum of assumptions—or possibly with none at all—how may we hope to accomplish anything by formal deduction? If because of the incommensurability of psychics we are to find objective regularities for a law of price or productivity or income, what must be the scope of our investigations and our attitude toward a static view?

It is plain that, in parting from sensationalism and an abstract deductive discipline erected upon its foundations, we have committed ourselves to several novel duties. Instead of statics, dynamics must To be more precise, we must supplement our short-time views by a long-time view, knitting the two together as parts of one analysis, or possibly under different headings. Events will be studied essentially as they occur in the real world about us, and not as isolated abstracts of human nature, or, worse vet, of functions mathematically equated. Correspondingly, the exchange mechanism itself may not suffice to tell the whole story. We may be prompted to go beyond catallactics in order to complete our qualitative analysis, or for the sake of finding more or less permanent relations of a quantitative character. Our methods of inquiry will thus be affected too. Deduction, for instance, may come to mean something different from formal logic, once we realize the difference between universals or classes and empirical data of a highly complex and variable make-up. Whether deduction and induction are the opposites that they have been made out to be is incidentally a question suggested by a critique of hedonistic sensationalism. In addition there remains the need of looking for quantitative regularities that will compensate us for what is lost in The inward nature of statistical induction, the scope utilitarianism. and technique of descriptive statistics, the selection and classification of materials to be correlated from the standpoint of a new concept of law and causation, of deduction and social science—here are topics calling for a careful examination and for hard work.

Whether in the end we shall conclude that a half-philosophical, half-scientific qualitative analysis is all that may be attempted; or whether we shall decide to apply different sorts of measurements to different subjects, no one may know beforehand. The uncertainty with regard to future developments is great. For some time indeed it will be true that economists are "terrible doubters" who accept nothing on faith. Yet that a unique situation exists today is patent enough. Whatever our beliefs, whatever our attitude toward either the critic or the conservative who would cling to what once was considered worth while, we may surely agree that we are on the eve of great events in economic theory. An unparalleled situation may lead to unparalleled achievements.

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